



Arlington Conservation Commission

Date: Thursday, September 1, 2022

Time: 7:00 PM

Location: Conducted by Remote Participation

Pursuant to State Legislation suspending certain provisions of the Open Meeting Law, G. L. c. 30A, § 20 relating to the COVID-19 emergency, the September 1, 2022, public meeting of the Arlington Conservation Commission shall be physically closed to the public to avoid group congregation. The meeting shall instead be held virtually using Zoom. Please register in advance for this meeting. Reference materials, instructions, and access information for this specific meeting will be available 48 hours prior to the meeting on the Commission's agenda and minutes page.

Agenda

1. Updates
 - a. Park & Recreation Commission Liaison
 - b. Tree Committee Liaison
 - c. Water Bodies Working Group
2. Discussion
 - a. CPA Preliminary Applications
 - b. Town Day Event Planning
3. Hearings

Request for Determination of Applicability: 429 Mystic Street (Continuation)

Request for Determination of Applicability: 429 Mystic Street (Continuation)

Documents: 429 Mystic Revised Floodplain Assessment and Planting Schedule

This public hearing will consider a Request for Determination of Applicability for a deck installation at 429 Mystic Street. Work is proposed to be conducted within the 100-foot Buffer Zone and Adjacent Upland Resource Area to Upper Mystic Lake as well as Bordering Land Subject to Flooding (FEMA Zone AE).

Request for Determination of Applicability: 23 Forest Street

Request for Determination of Applicability: 23 Forest Street

Documents: 23 Forest Street RDA Package

This public hearing will consider a Request for Determination of Applicability for construction of a driveway and fence at 23 Forest Street. Work is proposed to be conducted within the 200-foot Riverfront Area, Adjacent Upland Resource Area, and Buffer Zone to Mill Book.

Notice of Intent: 67 Dothan Street

Notice of Intent: 67 Dothan Street

Documents: 67 Dothan Street NOI Package

This public hearing will consider a Notice of Intent to grade the backyard, install new drainage, and install a fence at 67 Dothan Street. Work is proposed to be conducted within the Adjacent Upland Resource Area and Buffer Zone to Reed's Brook.



Town of Arlington, Massachusetts

CPA Preliminary Applications

Summary:

CPA Preliminary Applications



Town of Arlington, Massachusetts

Town Day Event Planning

Summary:

Town Day Event Planning



Town of Arlington, Massachusetts

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ATTACHMENTS:

	Type	File Name	Description
▢	Reference Material	429_Mystic_Revised_Floodplain_Assessment.pdf	429 Mystic Revised Floodplain Assessment
▢	Reference Material	429_Mystic_Street_Revised_Planting_Schedule.pdf	429 Mystic Street Revised Planting Schedule



- Buildings
- Elevation Contour (2ft)
- FEMA 1% - 100 Year Flood
- FEMA Floodway
- Parcels
- MA Highways
- US Highway
- Numbered Routes
- Abutting Towns
- Town Boundary
- Cemetery - Roads
- Road1
- Road2
- Road3
- Road4
- Pavement Markings
- Impervious Surface - For B
- Street
- Street
- Street Island
- Driveway
- Private Lot
- Bike Path
- Roads - For Large Scale (ft)
- Roads - For Small Scale (ft)
- Major Road
- Local Road
- Master Plan Base Map - M
- Water Line
- Water Body



The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.

Subject: Fwd: plantings

From: Don Westwater <westwaterdesignbuild@gmail.com>

Date: 8/16/2022, 10:08 PM

To: David Morgan <dmorgan@town.arlington.ma.us>, "Carey, Kathleen A." <KACAREY@mgh.harvard.edu>

CAUTION: This email originated from outside of the Town of Arlington's email system. Do not click links or open attachments unless you recognize the REAL sender (whose email address in the From: line in "<>" brackets) and you know the content is safe.

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

David,

The landscaper just sent this. Should we give both pics to commissioners and let them have at it?

Thanks,
Don

----- Forwarded message -----

From: **Jennifer ODonnell** <agardeneronthehill@gmail.com>

Date: Tue, Aug 16, 2022 at 9:46 PM

Subject: Re: plantings

To: Don Westwater <westwaterdesignbuild@gmail.com>

All natives- gotcha. I was aiming for pollinators, draught tolerant & soil stabilizers that won't get eaten by the rabbits. :)

See how they feel about these guys. :)

Instead of Lilac: Fothergilla gardenii.

Instead of Vinca: wild strawberry (Fragaria virginiana) or long-leaved bluet (Houstonia longifolia)

Instead of Liriope: Northern seaotes (Chasmanthium latifolium)

Instead of Catmint, False Indigo (Amorpha fruticosa)

Aster: New England Aster (Aster novae-angliae)

On Thu, Aug 11, 2022 at 10:45 PM Don Westwater <westwaterdesignbuild@gmail.com> wrote:

Hi Jenn,

We had our meeting with the conservation commission and it was, again, delayed for vote until the next meeting which is next Thursday.

They had questions about suggested plantings from the sketch you provided. they want native plants.

The Conservation agent sent the following which might be helpful. What do you think?

Suggested Plant	Native Alternative
Lilac	False indigo (<i>Amorpha fruticosa</i>)
Vinca	Long-leaved bluet (<i>Houstonia longifolia</i>)
Liriope	Deertongue (<i>Dichanthelium clandestinum</i>), maybe Northern seaotes (<i>Chasmanthium latifolium</i>) as a climate change adaption option
Catmint	Northern Blazing Star (<i>Liatris novae-angliae</i>), which might be hard to find. There are other alternatives your consultant can recommend.
Aster	This will depend on the kind of aster proposed. Please have the landscape architect specify the species.

Thank you!

Don't forget to send a bill!

--

Don

Home Services & Solar Analysis
429 Mystic St
Arlington, MA 02474
781 454 9143 cell

--

Best wishes,
Jennifer O'Donnell
Garden Designer & Consultant | Gardener on the Hill



[Follow me on Instagram](#)
[Gardener on the Hill](#)

--

Don

Home Services & Solar Analysis
429 Mystic St
Arlington, MA 02474
781 454 9143 cell



Town of Arlington, Massachusetts

Request for Determination of Applicability: 23 Forest Street

Summary:

Request for Determination of Applicability: 23 Forest Street

Documents: 23 Forest Street RDA Package

This public hearing will consider a Request for Determination of Applicability for construction of a driveway and fence at 23 Forest Street. Work is proposed to be conducted within the 200-foot Riverfront Area, Adjacent Upland Resource Area, and Buffer Zone to Mill Book.

ATTACHMENTS:

	Type	File Name	Description
▢	Reference Material	23_Forest_Street_RDA_Package.pdf	23 Forest Street RDA Package



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Arlington MA

City/Town

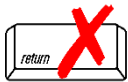
WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Thomas Taylor and Karen Erickson

Name

karenerickson@earthlink.net

E-Mail Address

23 Forest Street

Mailing Address

Arlington

City/Town

MASS

State

02476

Zip Code

617-281-9031

Phone Number

N/A

Fax Number (if applicable)

2. Representative (if any):

N/A

Firm

Contact Name

E-Mail Address

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

B. Determinations

1. I request the Arlington Conservation Commisison make the following determination(s). Check any that apply:

- ☐ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- ☐ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- ☒ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- ☒ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Arlington, Massachusetts

Name of Municipality

- ☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Arlington MA

City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

23 Forest Street

Street Address

Arlington

City/Town

57

Assessors Map/Plat Number

2-8.A

Parcel/Lot Number

- b. Area Description (use additional paper, if necessary):

See attached maps for project location.

- c. Plan and/or Map Reference(s):

Town of Arlington Wetland and Flood Map-Floodplain Map of Site

Title

7.19.2022

Date

Town of Arlington Wetland and Flood Map-Topographical Map of Site

Title

7.11.2022

Date

Work Plan showing Boundaries and Area of Permeable Driveway

Title

8.22.2022

Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

See attachment for Work Description



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Arlington MA

City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

See attachment for Project Description

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- ☐ Single family house on a lot recorded on or before 8/1/96
- ☐ Single family house on a lot recorded after 8/1/96
- ☐ Expansion of an existing structure on a lot recorded after 8/1/96
- ☒ Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- ☐ New agriculture or aquaculture project
- ☐ Public project where funds were appropriated prior to 8/7/96
- ☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- ☐ Residential subdivision; institutional, industrial, or commercial project
- ☐ Municipal project
- ☐ District, county, state, or federal government project
- ☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Arlington MA

City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Thomas Taylor and Karen Erickson

Name

23 Forest Street

Mailing Address

Arlington

City/Town

MA

State

02476

Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant

Date

Signature of Representative (if any)

Date



Forest St

Mill Brook

Mill Brook

Ryder St

Mill Brook

Ryder St

Forest St

Ryder St

Forest St

Peirce St

28

14

23

Town of Arlington, Massachusetts
Conservation Commission
Request for Determination of Applicability (RDA)
23 Forest Street, Arlington, Massachusetts 02476
Applicants: Karen Erickson and Thomas Taylor, Owners

Project Description:

Request to Install Deeded Parking Space at 23 Forest Street

Project Intent:

In compliance with Massachusetts General Law Chapter 131, Section 40, the Wetlands Protection Act and its accompanying Regulations, 310 CMR 10.00, and in compliance with Arlington's Wetlands Bylaw, Title V-Article 8, and the Arlington Wetlands Protection Regulation, the owners of 23 Forest Street, Arlington, Massachusetts, seek Town approval to install a small residential parking area (12'6" wide by 18'6" long) corresponding to a currently deeded and previously approved and built concrete driveway inset with granite posts in place. The driveway cut out is directly adjacent to the 23 Forest Street building and the proposed parking area is not physically close to any direct waterways or wetlands through the lot property. The RDA is required because the 23 Forest Street property is within a wetlands zone and deeded parking space must be approved to ensure no environmental damage will be caused by the new parking space.

PROJECT LOCATION and CHARACTERISTICS

The proposed parking space construction area is on the 23 Forest Street Arlington property (lot) and is outside of the designated floodplain and floodway. See attached maps. Along Forest Street, the distance from the nearest edge of the driveway space to the brook is approximately 90 feet. The distance from the edge of the parking space area directly across the 23 Forest Street property to the channelized brook abutting the property is approximately 65 feet. The land directly between the parking spot along Forest Street to the brook has curbside grass with one tree. The 23 Forest Street property from the deeded driveway and parking space areas to the brook has multiple robust varieties of flower gardens with ornamental grasses and perennials in place as well as a border of bushes and planting. The curb grass and garden vegetation provide a significant barrier to any unwanted sedimentation and erosion.

The entire length of the brook abutting the 23 Forest Street property is channelized with:

- a continuous large fieldstone base for the brook bottom, and
- 6 foot high and 1 foot thick fieldstone walls border both sides of the brook. Based on the channelized nature of the brook's containment, there should be almost no unwanted sedimentation into the waterways. In addition, as part of the construction related to the parking space, the contractor will set up erosion controls at the limit of the parking space work. The current barriers and proposed parking space construction will substantively reduce or eliminate any erosion.

Project Milestones

The proposed parking space construction will be provided by a contractor acceptable to the Town of Arlington. Specific project milestones based on recommendations from the contractor will include choosing and implementing:

- calculating and completing the dimensions and depth of the crushed gravel or other recommended substance to be utilized for the parking spot are consistent with Wetland Protection guidelines;
- confirming and completing the parking space surface allows for adequate continued drainage and filtration through added protection such as True Grid Pro Lite Permeable Pavers or other approved device;
- confirming and completing erosion control at the limit of the parking space consistent with applicable Wetland Protection guidelines.
- confirming and completing all required design, implementation and completion and approval of required project plans & completion.

Since the proposed work is to convert a small portion of the existing lawn to a parking space, the activities should be considered minor per 301.CMR 10.02. This work does not fall within (2) (e), the 200 foot riverfront boundary.

The existing land area for the proposed parking space is permeable and will continue to be permeable with the proposed design. The proposed project is located on the 23 Forest Street lot that does not impact public or private water supply or ground water supply. The impact of the project will produce no runoff and will utilize either Local Gravel or Crushed Concrete for the parking area.

Proposed Activities:

1. Complete RDA Application and related documents in consultation with the designated Town of Arlington Conservation Agent and related parties.
COMPLETED
2. Review current drainage and acceptable parking area materials suitable for residential parking in coordination with the designated Arlington Conservation Agent.
COMPLETED
3. Complete all requested documents for Conservation Commission hearing.
IN PROCESS
4. Pay all fees related to the application (RDA) and other required fees.
IN PROCESS
5. Obtain Official Abutters List from Arlington Town Clerk and Complete Certified Abutters Notification Mailing in coordination with the Conservation Agent after confirmation of the hearing date is provided by the Agent.
RECEIVED 7.21.2022
6. After completion of the RDA application in consultation with designated conservation agent, completion of required pre-hearing activities, the Conservation Commission hearing, and Town approval of the written RDA, obtain written approval from the Town Conservation Commission.
TO BE DETERMINED
7. Remove a portion of current wooden fence adjacent to Forest Street and driveway cutout to protect drainage and provide environmentally-friendly and permeable parking space. The parking space project will utilize TRUEGRID | PRO LITE Permeable Pavers as recommended by the Town of Arlington Conservation Officer to accomplish the goal of maintaining permeability of the parking space surface.
TO BE DONE AFTER RDA APPROVAL BY CONSERVATION COMMISSION

8. Obtain any required Town regulatory approvals of completed parking area work after alterations complete.

AS NEEDED

9. Install wooden fence on 23 Forest Street lot around the interior perimeter (three sides) of the parking area to protect condominium residents from street noise and to maintain fence continuity of the 23 Forest Street wall.
TO BE DONE AFTER RDA APPROVAL BY CONSERVATION COMMISSION

THIS DOCUMENT IS AN ATTACHMENT TO THE WPA FORM 1-REQUEST FOR DETERMINATION OF APPLICABILITY for 23 Forest Street, Arlington MA.
Deeded Parking Space Application

See other attachments:

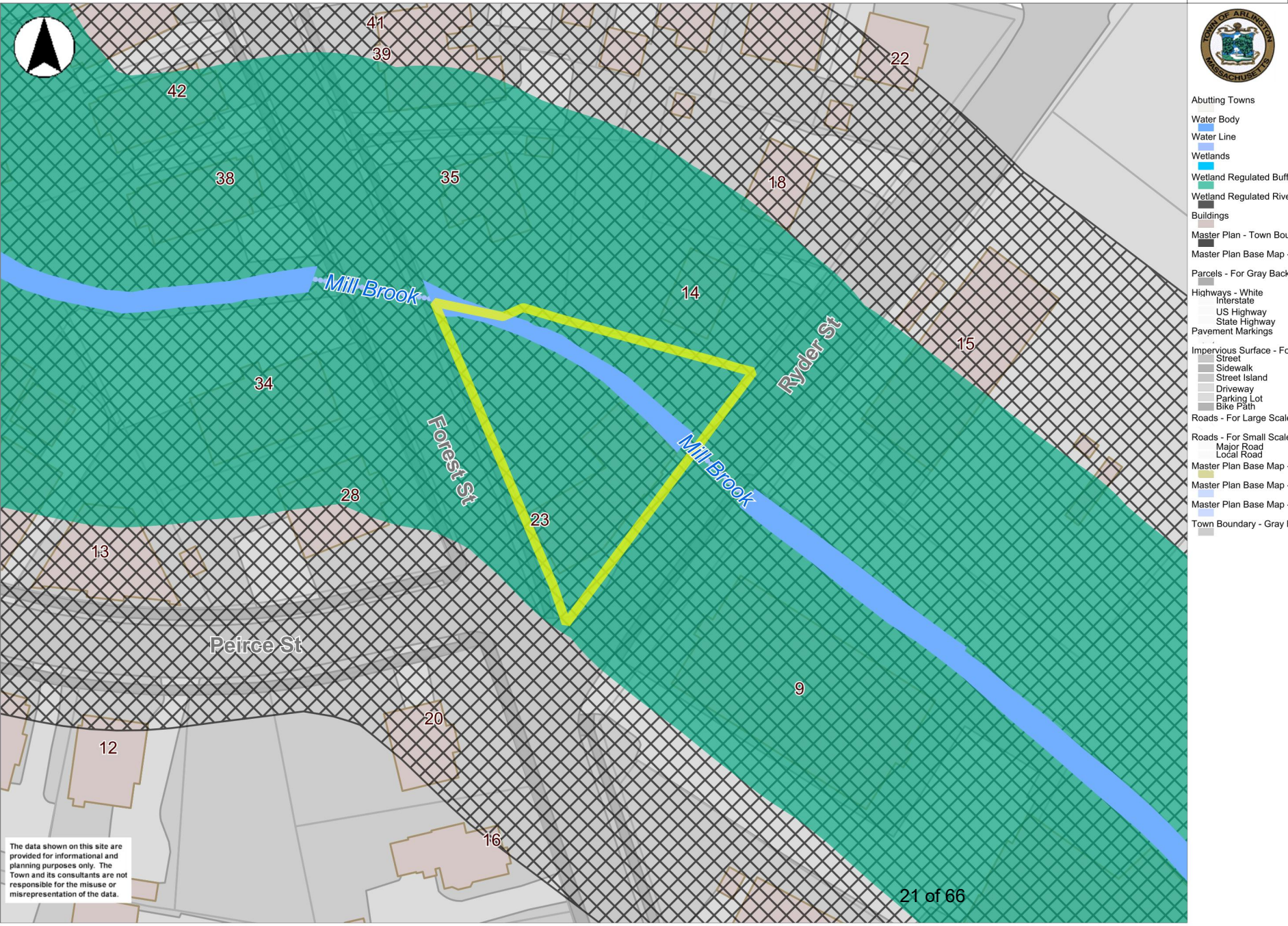
Plan and/or Map Reference(s)

Wetland & Flood Plain Map of 23 Forest Street, Arlington MA

Wetland & Flood Plain Topographic Map of 23 Forest Street, Arlington MA

23 Forest Street Parking Space Boundaries Sketch

Product Sheet: TRUEGRID | PRO LITE Permeable Pavers, Selected pages.



- Abutting Towns
- Water Body
- Water Line
- Wetlands
- Wetland Regulated Buffer
- Wetland Regulated Riverfront
- Buildings
- Master Plan - Town Boundary
- Master Plan Base Map - Sc
- Parcels - For Gray Background
- Highways - White
- Interstate
- US Highway
- State Highway
- Pavement Markings
- Impervious Surface - For B
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- Street Island
- Driveway
- Parking Lot
- Bike Path
- Roads - For Large Scale (f
- Roads - For Small Scale (f
- Major Road
- Local Road
- Master Plan Base Map - M
- Master Plan Base Map - W
- Master Plan Base Map - W
- Town Boundary - Gray Back

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0 81 162 ft

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Wetland and Flood GIS Viewer

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CATALOG

2021



World's Strongest Permeable Pavers

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US Patent #8,734,049 | US and Foreign
Patents Pending

22 of 66

1

DRIVEN BY PURPOSE...

We have a clarity of purpose for our business: to challenge conventional thinking and disrupt traditional paving methods; to ultimately create a better, cleaner, less toxic environment for our kids.

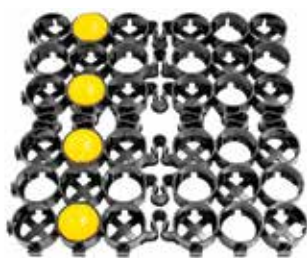
By offering a simple new green technology that is easily actionable, together we can make an impact now. Less flooding. Cleaner air and water. Less heat. Less thermal pollution. Less waste in the landfill. Fewer toxins from runoff pollutants as well coal tar & asphalt. A more natural landscape.

PRO LITE



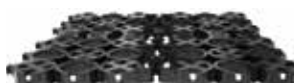
The Residential
Paver

PRO PLUS®



The Commercial
Paver

ROOT™



The Grass
Paver

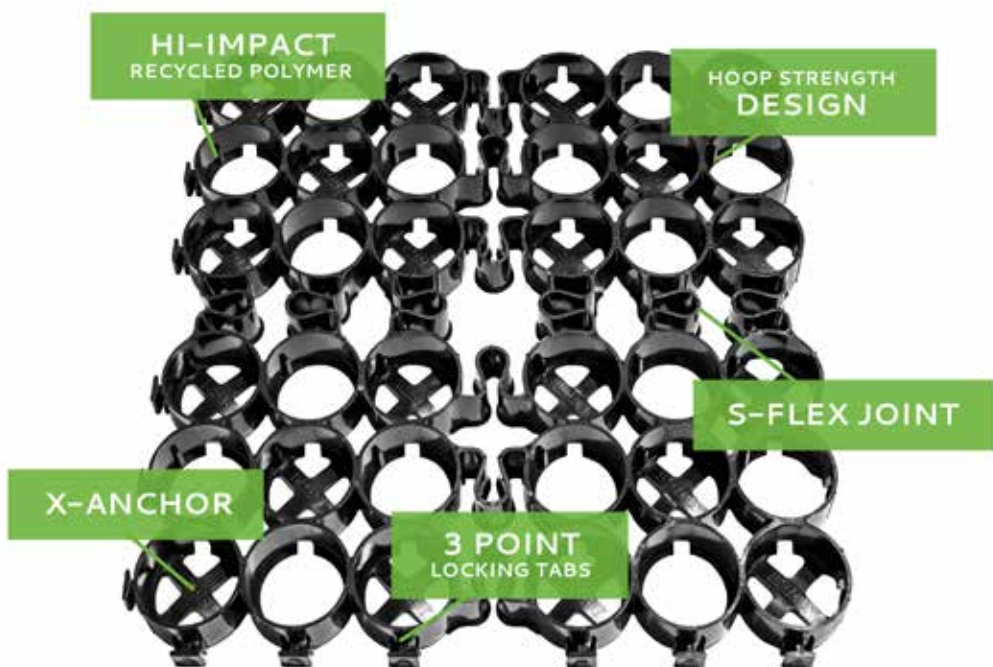
MACK™



The Industrial
Paver



DESIGN FEATURES



U.S. Patent No. 8,734,049

The robust cells allow our 2 lb grid to handle over 1 million lbs per square foot load! No gravel migration, compaction or dust. **100% permeability.** The grid can be pressed together by hand, no tools, no clips. With the integral X-anchors, no staking is needed. A bottom flange prevents sinking. Other systems are either too flexible & weak & can't handle trucks or traffic; or too rigid because soils move and paving cracks! The S-Flex Joints solve these problems giving our grid the best of both. A versatile design for any climate or soil or weight or traffic load.

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GRAVEL FILL



GRASS FILL

INTRODUCTION TO THE TRUEGRID SYSTEM



In urban watersheds, almost all of the impervious surface area is represented by building rooftops and paved surfaces. In residential areas most of the paved area is represented by the roadway system and residential driveways. Parking lots and paved industrial storage areas represent an even larger portion of the impervious surface in commercial and industrial areas. Impervious pavements can produce two-thirds of the excess runoff in an urban catchment. Runoff from impervious pavements contributes a substantial loading of hydrocarbons and heavy metal pollutants, and contributes greatly to the increased temperature of surface runoff. In most urban jurisdictions, a paved roadway system with a traditional curb and gutter configuration provides a key component of the overall urban drainage system. Surface flow from adjoining tributary watersheds is conveyed directly into catch basin inlets and connected piping systems. In these traditional impervious paved systems, the runoff coefficient (runoff volume) is increased and the time of concentration is decreased resulting in increased peak rates of runoff. TRUEGRID provides a highly permeable stabilized surfaces that can be used for the movement and parking of vehicles (automobiles, trucks, construction equipment, aircraft, etc.) and storage of materials and equipment.

Drive on the surface, drain & detain stormwater below.

Compared to conventional pavement, the TRUEGRID system is designed to infiltrate storm water runoff instead of shedding it off the surface. TRUEGRID will reduce the amount of runoff by allowing water to pass through surfaces that would otherwise be impervious. The storm water passes through the load bearing surface and aggregate sub base that are selected based upon the intended application and required infiltration rate. Runoff is stored in the stone aggregate sub base course / storage layer, and allowed to infiltrate into the surrounding soil (functioning like an infiltration basin).

A TRUEGRID surface has very high initial surface infiltration rates and can immediately infiltrate and store rainfall and runoff from high intensity rainstorms. In many cases, direct runoff is completely eliminated. The surface infiltration rates for TRUEGRID will in most cases exceed 800 inches/hour. This is several orders of magnitude higher than all the rainfall intensities encountered in the Southwest and Midwest USA.



Compared to conventional pavement, the TRUEGRID system is designed to infiltrate storm water runoff instead of shedding it off the surface. TRUEGRID will reduce the amount of runoff by allowing water to pass through surfaces that would otherwise be impervious. The storm water passes through the load bearing surface and aggregate sub base that are selected based upon the intended application and required infiltration rate. Runoff is stored in the stone aggregate sub base course / storage layer, and allowed to infiltrate into the surrounding soil (functioning like an infiltration basin).

SUB-BASE CONSIDERATIONS

FOR STORM WATER DETENTION

Crushed aggregate meeting ASTM No. 57 is commonly used for open-graded sub bases along with ASTM No. 2 to No. 4. These materials are widely available and they are recommended for most TRUEGRID Permeable Paver applications. These materials will have a nominal porosity (volume of voids/total volume of base) over 0.32 and a storage capacity in the void space (volume of voids/volume of aggregate) approaching 40%. A 40% void space provides 0.4 cubic feet of storage capacity for each cubic foot of aggregate (the volume of the base will need to be 2.5 times the volume of water to be stored).

Sub-Base for Grass Infill Installations. Should be a ¾" minus, sandy gravel road base. Although reducing the stormwater storage capacity to around 20%, this base will grow grass, support heavy loads, and drain.

CHART A: PERMEABLE BASE
AASHTO #57 PERMEABLE SUB-BASE MATERIAL DEFINED AS:

SIEVE SIZE		PERCENT PASSING	
MM	IN	#57	TYPICAL
37.5	1½	100	100
25	1	95 - 100	97
19	¾		75
12.5	½	26 - 60	45
9.5	¾		25
4.75	#4	0 - 10	5
2.36	#8	0 - 5	2

ENDLESS GRAVEL FILL OPTIONS



THE VALUE TO THE TRUEGRID SYSTEM

Runoff volume reduction/elimination is achieved when TRUEGRID is placed over in situ soils and a defined volume of the water passing through the pavement is infiltrated into the angular stone base and soil subgrade below.

Peak runoff rate reduction is achieved when the volume of water passing through the TRUEGRID surface is “detained” for a defined period of time within the pavement cross-section and the open graded aggregate sub base beneath the pavement. The effective infiltration rate for the watershed is increased by trapping the water in the permeable surfaces and effectively increasing the time of concentration in the catchment area.

Pollutant removal. Infiltration of storm water runoff through the pavement surface will provide a degree of suspended solids removal followed by additional removal of colloidal solids and soluble pollutants in the aggregate sub base and sub soils. Sorption of metals to colloidal solids and within the pavement void matrix is another removal function. Soluble organic pollutants adsorbed within the pavement void matrix and the open graded aggregate sub base will be exposed to biodegradation over time.

TYPICAL POLLUTANT REMOVAL (%)

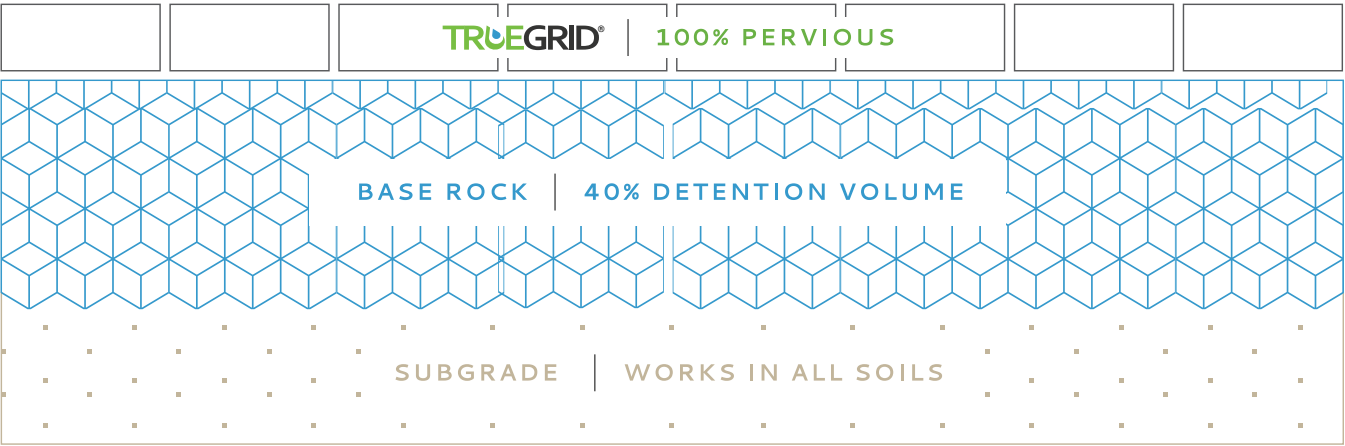
BMP TYPE	SUSPENDED SOLIDS	NITROGEN	PHOSPHOROUS	PATHOGENS	METALS
TRUEGRID	65 - 100	65 - 100	30 - 65	65 - 100	65 - 100
Dry Retention Basins	30 - 65	15 - 45	15 - 45	< 30	15 - 45
Retention Basins	50 - 80	30 - 65	30 - 65	< 30	50 - 80
Constructed Wetlands	50 - 80	< 30	15 - 45	< 30	50 - 80
Infiltration Basins	50 - 80	50 - 80	50 - 80	65 - 100	50 - 80
Infiltration Trenches / Dry Wells	50 - 80	50 - 80	15 - 45	65 - 100	50 - 80
Grassed Swales	30 - 65	15 - 45	15 - 45	< 30	15 - 45
Vegetated Filter Strips	50 - 80	50 - 80	50 - 80	< 30	30 - 65
Surface Sand Filters	50 - 80	< 30	50 - 80	< 30	50 - 80

Reduces Heat Island Effect. Heat Island Effect occurs in areas such as a city and industrial sites that have consistently higher temperatures than surrounding areas because of greater retention of heat. This retention of heat is due to buildings, concrete, and asphalt. Using TRUEGRID in these “hot spot” areas for pathways, parking lots, driveways, roofs...etc., reduces the absorbability of solar rays and thus helps steady and cool the natural environment.

High load bearing capacity. TRUEGRID is designed with the highest load capacities of any grid system and can withstand significant structural loads. TRUEGRID provides a stable and continuous load-bearing surface throughout parking areas.

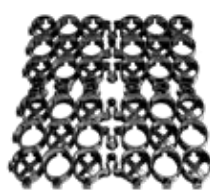
COMPETITION COMPARISON

SPECIFICATION	TRUEGRID	ROLL-OUT PLASTIC PAVERS	CONCRETE PAVERS
Strength (filled)	9510 psi	5730 psi	5000
Flexural Strength	High	None (rolled paver)	High
Weight (lbs/sf)	1.32	0.42	37
Tensile Strength	2852 lbs	458 lbs	NA
Fill rock size	Up to 1"	Up to ¾"	NA
Staking	Not Required	Required	NA
Installation	1000 sf/hr	NA	Slow
Recycled content	100% post consumer	100%	0
Porosity	90%	90%	37%
Wall thickness	.250"/.150"	.104"	NA
Paver depth	1.8"	1.0"	2"
Cell Size (ID)	3.2"	2.15"	NA
Flexibility	Rigid w/ Flex joints	Flexible	Rigid
Adjoining cell walls	Yes	No	No
Flex joints	Yes	No	No
Joint type	Tab	Snap	None
Shear Transfer Strength	High	Low	None



GREEN

TRUEGRID Permeable Pavers are designed to provide design professionals with an eco-friendly alternative to concrete and asphalt and other impervious surfaces. Similar systems have been used in Europe for over 40 years and have been highly effective and accepted as a better alternative to impervious surfaces. TRUEGRID improved upon this concept and developed a stronger, more durable, USA made version that can handle any load and rigors concrete can handle....while being 100% permeable.



Made from 100% post-consumer recycled HDPE.

100% Permeable. Up to 100% of runoff water pollutants are removed via bioremediation.

Impact Scorecard

MEASURE THE DIFFERENCE



150K^{SF}
600 Car Lot

CO2 SAVED

967^{TONS}



PLASTIC RECYCLED

204K^{LBS}



STORMWATER DETAINED

40K^{CUBIC FT}



LEED Credit Opportunities

With **TRUEGRID**



STORMWATER
MANAGEMENT



RECYCLED
CONTENT



INNOVATION
& DESIGN



MATERIALS
& RESOURCES

Tons of CO2 emissions from the manufacturing of cement are eliminated. Millions of lbs of plastic are kept out of landfill and recycled from a consumable to a 60 year life cycle useful product. Detention is added and flooding from stormwater is reduced. Coal tar & asphalt toxins are eliminated.

TRUEGRID has kept more than **12,000,000 lbs** of plastic out of landfills ...so far

PRODUCTS

TRUEGRID® PRO LITE

THE RESIDENTIAL PAVER



- Superior Patented Design
- Excellent Compression Strength. Best-in-class.
- Low traffic applications
- H20, HS20 Rated

SPECIFICATIONS:

- | | |
|-------------------------|---|
| · Dimensions: | 24" x 24" x 1.0" (4 sf) |
| · Pre-Assembled: | 16 sf per layer (4' x 4' sheet of 4 grids) |
| · Compression Strength: | 6200 psi filled. |
| · Permeability: | 100% |
| · Material: | 100% Post-Consumer Recycled HDPE |
| · Color: | Black with UV Stabilizer (Other Colors Available) |

MORE:

- No Staking or Clips
- Works in All Climates & Soils
- May be Saw Cut
- Grass or Gravel Fill
- High Heel Friendly



APPLICATIONS:

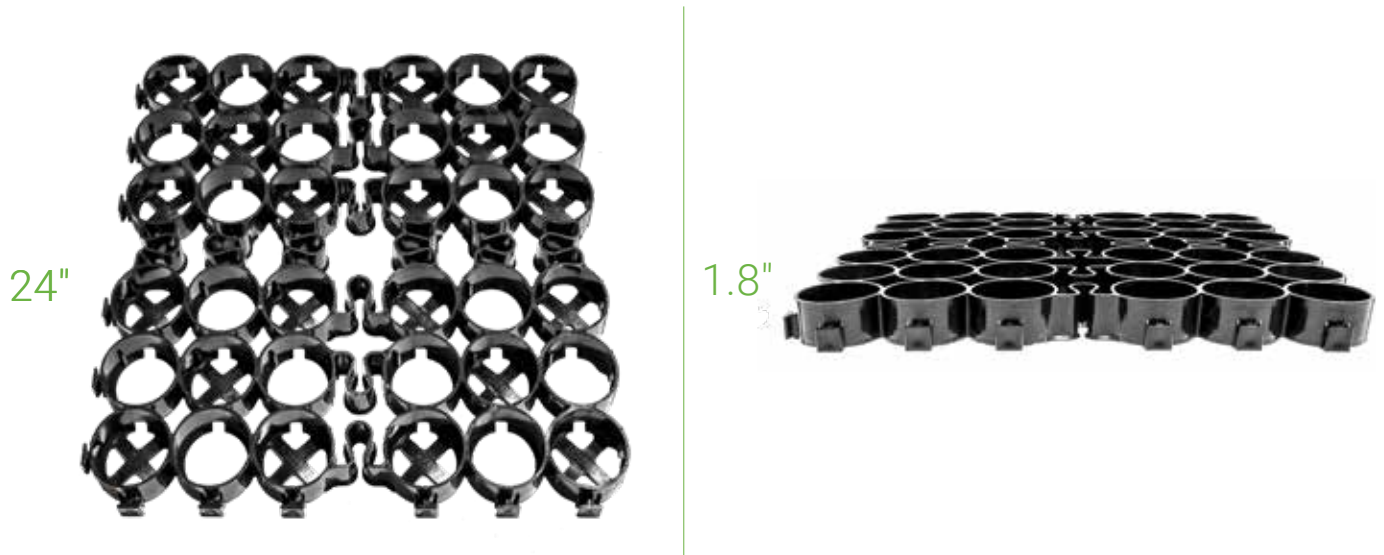
- Driveways
- Parking lots
- Event Parking
- Firelanes
- Grass Overflow Parking
- Community Green-Space
- Golf Cart Paths
- Walk/Bike Trails
- Pathways



PRODUCTS

TRUEGRID® PRO PLUS®

THE COMMERCIAL PAVER



- Works with SuperSpot® Parking Markers
- Superior Patented Design
- Engineered for Heavy Loads & Heavy Traffic
- Industry-Best Strength
- Industrial or Commercial Applications
- H20, HS20 Rated

SPECIFICATIONS:

- Dimensions: 24" x 24" x 1.8" (4 sf)
- Pre-Assembled: 16 sf per layer (4' x 4' sheet of 4 grids)
- Compression Strength: 9510 psi filled
- Permeability: 100%
- Material: 100% Post-Consumer Recycled HDPE
- Color: Black with UV Stabilizer

MORE:

- No Staking or Clips
- Works in All Climates & Soils
- May be Saw Cut



COMMERCIAL APPLICATIONS:

- Parking Lots
- Equipment & Truck Yards
- Storage Lots
- Drive Lanes
- Roadways
- Fire Lanes
- Rig Sites
- Event Parking





SuperSpot® for TRUEGRID PRO PLUS

- Maintenance-Free Parking Markers
- Delineate Parking for Max Efficiency
- Create Arrows & Traffic Flow Markers
- High Visibility Profile
- Heavy Loads, Heavy Traffic
- Easy Snap-Lock Installation
- Never Stripe Again

SPECIFICATIONS:

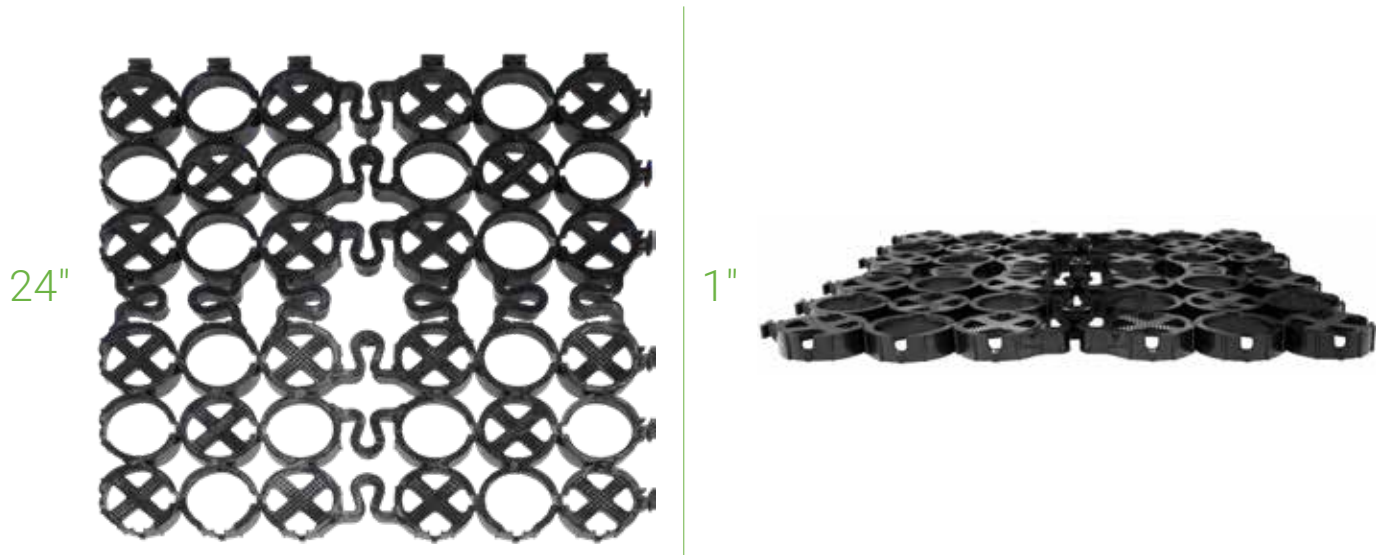
- Support Ribs for Strength
- 0.90" Domed Profile
- UV Stabilized

PRODUCTS

TRUEGRID® ROOT™

 NEW PRODUCT

THE GRASS PAVER



- Advanced Patented Design
- Protects Grass from Rutting
- Fast, Easy Installation
- Usually Costs Less than Asphalt

SPECIFICATIONS:

- | | |
|------------------|---|
| · Dimensions: | 24" x 24" x 1.0" (4 sf) |
| · Pre-Assembled: | 16 sf per layer (4' x 4' sheet of 4 grids) |
| · Strength: | Holds up to 10,000 lbs GVW |
| · Permeability: | 100% |
| · Material: | 100% Post-Consumer Recycled HDPE |
| · Color: | Black with UV Stabilizer (Other Colors Available) |

MORE:

- Only Available Immediate Heavy Load Grass System
- Stabilized Grass Drains. No Runoff.
- 100% Recycled Plastic
- Little or No Maintenance
- 60-Year Lifespan

APPLICATIONS:

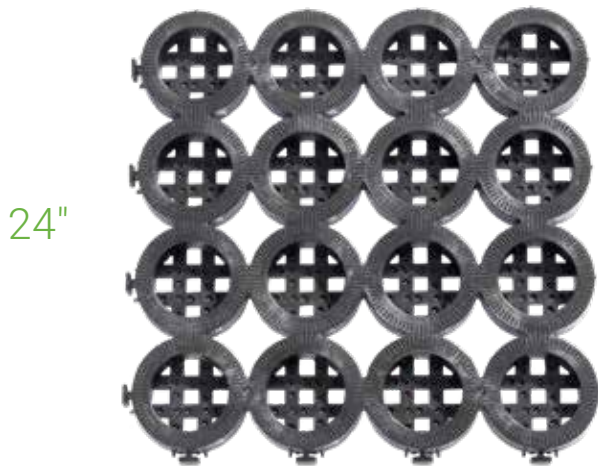
- Grass Parking for Cars & Trucks
- Festival Site Protection
- Light Aircraft Runways & Taxiways
- Event Centers
- Paths & Trails
- Slope & Scour Protection
- RV & Boat Storage & Access
- Fairground Turf Support



PRODUCTS

TRUEGRID® MACK™

THE INDUSTRIAL PAVER



1.5"



EARTH GRABBING TEETH



- Double Wall I-Beam Construction
- Unique Patented Design
- Gridlock™ positive locks
- Earth grabbing teeth for torque strength
- Gripping traction tread surface
- 100% effective permeability
- Deep Cells for Gravel Containment

SPECIFICATIONS:

- Dimensions: 24" x 24" x 1.5" (4 sf)
- Pre-Assembled: 16 sf (4' x 4') Sheets (4 grids per sheet)
- Permeability: 100%
- Material: 100% Post-Consumer Recycled HDPE
- Color: Black with UV Stabilizer

MORE:

- No Staking or Clips
- Works in All Climates & Soils
- May be Saw Cut
- 20 + Year, Virtually Maintenance Free Life

SUPERSPOT® AVAILABLE



APPLICATIONS:

- Roadways
- Construction Site Access
- Truck terminals & sites
- Heavy Traffic Drive lanes
- Military
- Extreme Applications
- Dust Control
- Service Roads

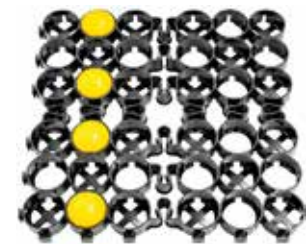


ACCESSORIES

SUPERSPOTS®

MAINTENANCE-FREE PARKING DELINEATORS

Delineate your parking spots with easy-to-pop-in SuperSpot parking markers. No-restriping. Long-term UV resistance. Multiple color options for standard parking, fire lanes, handicapped designated spaces. Highly visible.



PRO PLUS



PRO LITE



MACK



SNOWSPOTS™

MAINTENANCE-FREE PARKING DELINEATORS

Delineate your parking spots with easy-to-pop-in SnowSpot parking markers. Flush with surface for worry-free snow plowing. No restriping. Long term UV resistant. Yellow or white for standard striping, blue for disabled-access spaces and red for firelanes.



SNOWSPOTS



The Plate™

EASY-TO-USE PARKING SPOT IDENTIFIER FOR PRO PLUS

Identify your spaces with easy-to-pop-in PLATE markers. Long-term UV resistance. Multiple color options for standard signs. Highly visible. *Patent Pending*



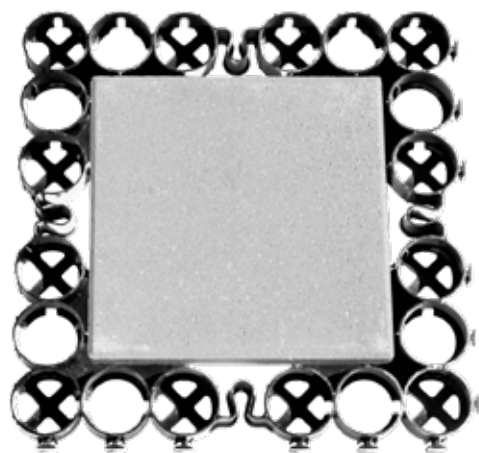
7.5"

14



ACCESSORIES

TRUEGRID® DECO™



A modular décor element, the TRUEGRID DECO adds functional nuance to your design. Use square, round or irregular shaped step stones to build walkways, ribbon driveways or any stepping area to add character to your project. Use DECO alone or attach to the TRUEGRID PRO PLUS paving system to create unique projects that are not only pleasing to the eye but sustainable.

FEATURES:

- Fits most 16" x 16" x 2" or smaller stone pavers
- 100% Post-Consumer Recycled HDPE
- Fits square, round or any irregular shaped stones
- Connects with TRUEGRID PRO PLUS
- Border cells allow for gravel or grass fill
- Drain through and detain under grid
- Stone paver not included



SPECIFICATIONS:

- Dimensions: 24" x 24" x 1.8" (4 sf)
- Pre-Assembled: 16 sf (4' x 4') sheets (4 grids per sheet)
- Permeability: 100%
- Material: Recycled High Density Polyethylene (100% post-consumer)
- Color: Black with UV Stabilizer

APPLICATIONS:

- Walkways
- Driveways
- Poolside
- Garden Paths
- Light Commercial Parking
- Dog park paths
- Common areas walks
- Patios

ARCHITECTS



“Man is a phase of nature, and only as he is related to nature does he matter, does he have any account whatever above the dust.”

Frank Lloyd Wright

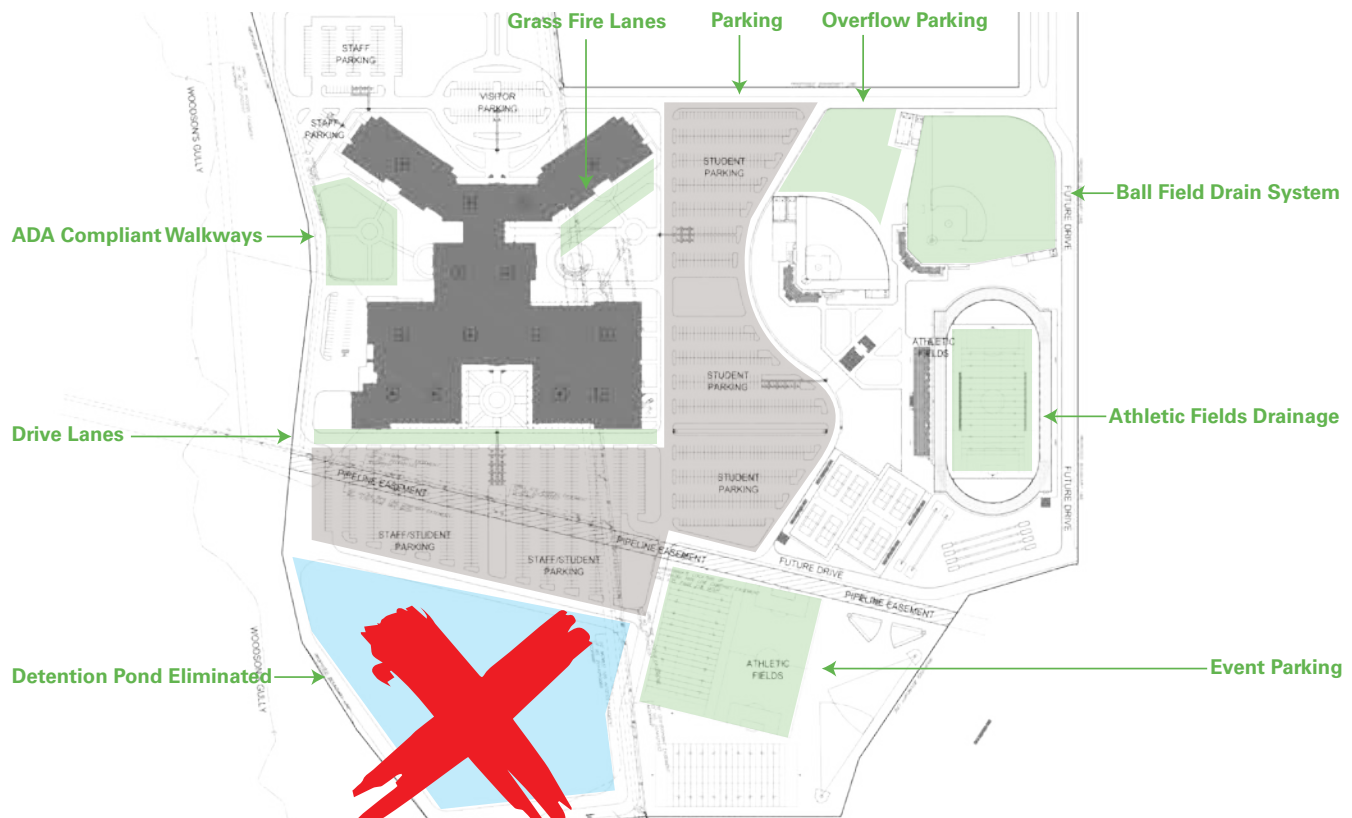
Endless Gravel Fill Options:



- Beauty
- Performance
- Sustainability

Achieve harmony & balance development with nature. Gain space for inspired functionality & green, creative livability. Retain & reuse stormwater onsite. Natural, upscale aesthetic. ADA compliance. Design with TRUEGRID.

DEVELOPERS



- 100% Land Utilization
- Durable & Pervious Cover
- Dollars

Save land & eliminate or reduce detention ponds. Drive on surface with detention under your parking lot. Maintenance-free 25 to 60 year life. Heavy traffic, heavy loads. TRUEGRID counts as 100% pervious cover. Construction costs up to 30% less than concrete. Sustainable, upscale natural aesthetic. LEED eligible. Build with TRUEGRID.



"Buy land, they're not making it anymore."

Mark Twain

ENGINEERS



- Detention
- Durability
- Dollars

“ Some people don’t like change, but you need to embrace change if the alternative is disaster.”

Elon Musk

Control flooding and manage stormwater. Best-in-class, engineered strength, structure & soil stabilization with TRUEGRID. Heavy traffic, heavy loads. H20, HS20 rated. 25+ year life. Save on construction costs (up to 50%) and land. Specify TRUEGRID.

CITY PROFESSIONALS



- Stormwater Management
 - Urban Heat Island (UHI) Reduction
 - Functional Green-Space
-

Reduce flooding and manage stormwater with TRUEGRID. Added detention volume. 100% pervious cover. Improved water quality & more parking. Cooler than asphalt or concrete. No gravel migration. Key tool in federal (EPA), state, county and city LID (Low Impact Development) guidelines and BMPs. Code with TRUEGRID.

1. Stormwater Detention Underneath



FLODOT UNDERPASS PROJECT

2. Drive on Durable Surface



CONTRACTORS



- Advantageous Price & Service Differentiator
 - Eco-Friendly Offering
 - Easy-to-Install
-

Gain a cost and speed advantage over conventional paving. Differentiate from competitors as a preferred TRUEGRID installer with a green, pervious, coded, less expensive paving system. Pave with TRUEGRID.

1. Grade the site



2. Lay, compact base



3. Drop the grid



4. Fill the grid



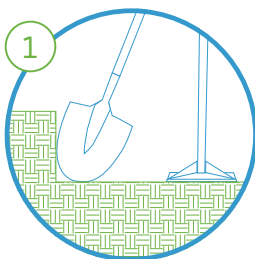
HORSE, LIVESTOCK, RANCH & FARM



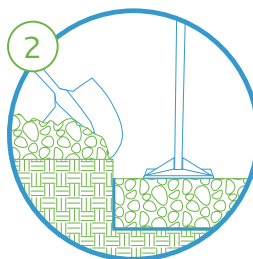
- Stops Mud in Paddocks. Maintenance-Free.
 - Thrush-Free Healthy Hooves.
 - No Standing Water. Drains Instantly.
-

TRUEGRID PRO PLUS® for Equine, Farm, & Ranch use offers an advanced patented design. Strong for heavy loads. Clydesdales to John Deere. Patented S-flex joints allow “crowning” of paddock surface for instant water draining. Stops digging. No ruts, mud or dust. Drains instantly. No standing water. Keeps area level or crowned as desired. Urine drains, reducing odor. Keeps bedding dry. No bacteria buildup. Supports heavy equipment loads & traffic.

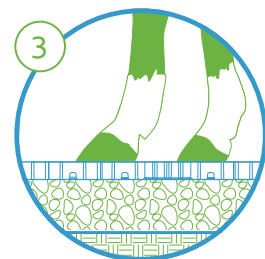
1. Scrape back, level, compact the area.



2. Lay filter fabric and ¾" minus base rock.



3. Lay PRO PLUS grid. Fill with soil.



WORKS IN ALL CLIMATES AND SOILS

STORM WATER DETENTION



100% PERVIOUS COVER



1000+ INCHES/HOUR INFILTRATION RATE

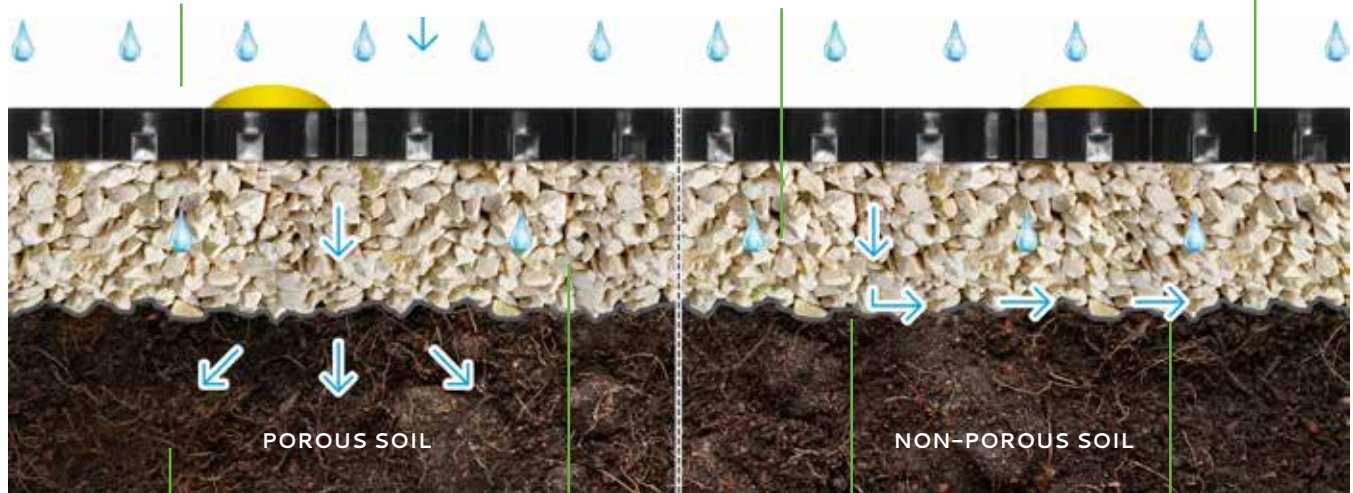


0.0 - 0.05 RUNOFF COEFFICIENT

CLEAN / WASHED ANGULAR AGGREGATE

STORM WATER INFILTRATION

SUB-BASE DEPTH CAN VARY FOR LOADING OR STORM WATER DETENTION REQUIREMENTS



STORM WATER NATURALLY PERCOLATES INTO SOIL

40% VOID SPACE ALLOWS FOR STORM WATER STORAGE

GEOTEXTILE FABRIC

SHEET FLOW OR DIRECT USING PERFORATED PIPE

HOW TO CALCULATE STORM WATER DETENTION CAPACITY

Detention Capacity = TRUEGRID Area (A) x Total Aggregate Depth (d) x 40% Void Space = $A \times d \times 0.40$

WHERE:

d = Depth of Sub-base + TRUEGRID Height

EXAMPLE:

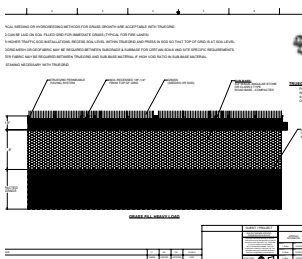
1 Acre Lot, TRUEGRID PRO PLUS, 8in Sub Base Fill & Sub Base - 3/4" Clean/Washed Angular Stone
Detention Capacity = $A \times d \times 0.40$

WHERE:

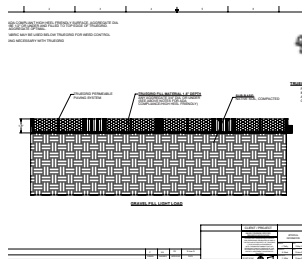
A = 1 Acre = 43,560 sf
d = 8 in + 1.8 in = 9.8 in = 0.8 ft
Detention Capacity = $43,560 \times 0.8 \times 0.4 = 13,939 \text{ cf}$

Go to TECHNICAL INFO on TRUEGRIDpaver.com for typicals. Call for site specific questions: 1-855-355-GRID (4743)

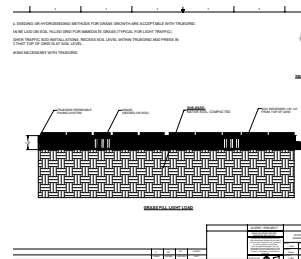
1. Grass Fill Heavy Load



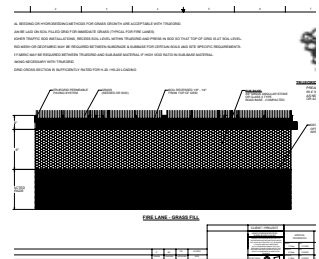
2. Gravel Fill Light Load



3. Grass Fill Light Load



4. Fire Lane





PROJECTS

SUPERBOWL LI® – CLUB NOMADIC® POP-UP NIGHT CLUB

- 62,500 SF Parking Lot Installed in 10 Days
- 3-Story Metal Nightclub Installed in 60 Days
- 100% Land Use - TRUEGRID Lot Eliminated Detention Pond



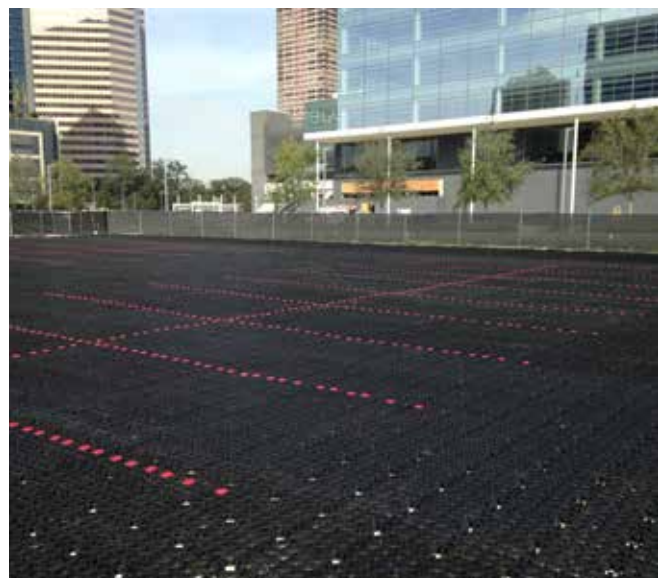
PROJECTS



Whole Foods Market®

"Great product. Went in quick. Our ADA compliant lot was down in time for the holidays."

John Fox (Construction Supervisor)



PROJECTS



Google®

FACT

TRUEGRID was tested and chosen over all other paving options by site engineers for Google at the Mountain View campus. Eco-friendly, durable and 100% permeable.



Pocono Raceway®—NASCAR®

"The new installed walkways were a huge success with our fans. The ease of installation and maintenance... we intend to once again use TRUEGRID Pavers throughout. It's a great product and fits in with our sustainability efforts."

Brandon Igdalsky – CEO

PROJECTS



Fire Lane

"We've completed all the tests. As far as supporting the truck as a driving material, we didn't have any issues there. When we set the outriggers up, in a normal operation with the pads underneath the outrigger, we were able to take the truck to its extreme test with all the weight all on one side. So that test was a success. We then took the outriggers without the pads and to increase the concentrated load on the system. It even supported those."

Fire Chief McCaskill



Self-Storage

"We got pervious cover credit for our entire lot and eliminated the entire 2.5 acre detention pond."

Hank Daughtry - New Braunfels Self Storage

PROJECTS



U.S. Military

"They spec TRUEGRID because of the its eco-friendliness as well as strength to handle anything."

Chris Smith- Gilmore Environmental Consulting



Industrial

"Our trucks and equipment don't get stuck anymore when it rains. The grid keeps us working."

David Bourgeois – (Purchasing Manager) Petrochem

PROJECTS



ROCKSTAR Energy Bike Park

The North Houston ROCKSTAR Energy Bike Park is the Largest BMX bike park in North America. 150K sf of PRO PLUS were spec'd and installed for 100% pervious cover, stormwater detention and the natural aesthetic that compliments the park.



NOCI Sonoma Edible Garden

TRUEGRID works in harmony with nature on a beautiful California site to blend seamlessly while allowing the site to meet stormwater management code requirements. TRUEGRID was used on the roadways, work areas, pathways and patios.

PROJECTS



Snowplowing - Cold Climate Use

FACT

Snow melts faster on TRUEGRID and there is less ice buildup. TRUEGRID can be easily plowed, snow-blown or shoveled.



Wellington Aero Park

This aero club community stabilized their grass taxiways and perpendiculars to keep flying in all seasons and weather conditions. A better solution than asphalt, the grass-filled TRUEGRID looks naturally beautiful while supporting plane traffic.

TRUEGRID® CASE STUDY

PARKING LOT EXPANSION

AutoNation® car dealership increases inventory lot space while saving almost half a million dollars.

PROBLEM:

Design a solution that will allow AutoNation to expand its current car inventory lot without spending more money on land.

CHALLENGES:

High cost for concrete, detention pond and drainage system cost, maximize land utilization for space challenged dealership, stormwater detention requirements for site for flood prone areas.

SOLUTION:

100 extra spaces is a grand slam to the dealership. The entire detention pond was eliminated with the 100% pervious TRUEGRID system and by transferring all of the required stormwater detention volume into the base and the gravel filled grid. Rain infiltrates the surface at over 1000 inches/hour and there is no runoff. SuperSpot parking markers were used instead of striping paint for maintenance free stripping.

TRUEGRID® VS. CONCRETE

- Land Savings: 25,000 sq ft
 - Construction Cost Savings: \$480k
 - Elimination of separate detention pond
- 100% Pervious Cover Credit
 - 100% Land Utilization
 - Zero Stormwater Runoff
- 100 extra parking spaces gained on the 500 space lot



ESTIMATED SAVINGS USING TRUEGRID

CONSTRUCTION COSTS (SQ FT OVER ENTIRE SITE VS. CONCRETE)	DETENTION POND & DRAINAGE CONSTRUCTION SAVINGS	TOTAL SAVINGS
\$360,000	\$120,000	\$480,000

TRUEGRID® CASE STUDY

WORLD'S LARGEST PERMEABLE PARKING LOT

Manheim Auto saves four acres and improves urban heat and flood drainage conditions for Texas Hobby Clients and Community.

PROBLEM:

With a concrete design 4 acres of the 15.5-acre site were needed for a detention pond which would limit car storage capacity. Design a solution that will allow for more vehicle storage, combat concrete/asphalt heat and provide stormwater drainage relief in flood-prone Houston.

CHALLENGES:

To mitigate localized flooding, stormwater management code requires on-site detention. Not only does this limit land use, the high cost for concrete, detention pond construction and drainage is high. How to maximize land utilization for on-site vehicle storage, and meet stormwater detention requirements.

SOLUTION:

All 15.5 acres are now utilized for parking by using the PRO PLUS system with Stormwater detention under the parking surface. The 4-acre pond was eliminated. Manheim Texas Hobby now holds 1,000 more vehicles than before – a significant advantage for clients who do business at the location. And, since no runoff reduces the chance of flooding, clients' investments in their vehicles are better protected. The TRUEGRID environmentally-friendly solution leaves no runoff and filters naturally to remove harmful hydrocarbons and pollutants which protects local aquifers.

TRUEGRID® VS. CONCRETE

- Total Land Available 625,000 SF
- Total Land Utilized 625,000 SF
- Land savings by eliminating detention pond: 4 Acres

- 100% Pervious Cover Credit
- 100% Land Utilization
- Zero Stormwater Runoff

- 1,000 Additional Vehicles Stored On-Site
- Less absorbed and reflected solar radiation

ESTIMATED SAVINGS USING TRUEGRID

CONSTRUCTION COSTS
(SQ FT OVER ENTIRE SITE VS. CONCRETE)

\$754,000

DETENTION POND & DRAINAGE
CONSTRUCTION SAVINGS

\$265,000

TOTAL SAVINGS

\$1,019,000

52 of 60

“Design is not just what it looks like and
feels like. Design is how it works.”

STEVE JOBS



TRUEGRID®
True to your project. True to the environment.

6110 Abbott Drive
Omaha, NE 68110
© 2021

TRUEGRIDPAVER.COM

855-355-GRID
53 of 66



Town of Arlington, Massachusetts

Notice of Intent: 67 Dothan Street

Summary:

Notice of Intent: 67 Dothan Street

Documents: 67 Dothan Street NOI Package

This public hearing will consider a Notice of Intent to grade the backyard, install new drainage, and install a fence at 67 Dothan Street. Work is proposed to be conducted within the Adjacent Upland Resource Area and Buffer Zone to Reed's Brook.

ATTACHMENTS:

	Type	File Name	Description
▢	Reference Material	67_Dothan_Street_NOI_Package.pdf	67 Dothan Street NOI Package



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

67 DOTHAN STREET

a. Street Address

ARLINGTON

b. City/Town

02474

c. Zip Code

Latitude and Longitude:

42.43500

d. Latitude

-71.17834

e. Longitude

117

f. Assessors Map/Plat Number

1-67

g. Parcel /Lot Number

2. Applicant:

JIYEONG

a. First Name

CHUN

b. Last Name

c. Organization

67 DOTHAN STREET

d. Street Address

ARLINGTON

e. City/Town

MA

f. State

02474

g. Zip Code

857-540-8589

h. Phone Number

i. Fax Number

JYCHUN20@GMAIL.COM

j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

CHRIS

a. First Name

CONNELLY

b. Last Name

OLIVER ENTERPRISES, INC.

c. Company

1429 OSGOOD STREET

d. Street Address

NORTH ANDOVER

e. City/Town

MA

f. State

01845

g. Zip Code

718-938-9213

h. Phone Number

781-404-5270

i. Fax Number

CHRIS@OLIVER-ENTERPRISES.COM

j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$860

a. Total Fee Paid

\$392.50

b. State Fee Paid

\$317.50

c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

A. General Information (continued)

6. General Project Description:

REMOVE ASPHALT PAVING, REMOVE SELECTED VEGETATION AS DIRECTED BY ARBORIST, BURY DRAIN LINE FROM BASEMENT SUMP AND DIRECT TO NEW STONE DRAINAGE SWALE, GRADE BACKYARD TO PITCH TO DRAINAGE SWALE, INSTALL SOD LAWN, INSTALL IRRIGATION SYSTEM, INSTALL NEW 6' PRIVACY FENCE ENCLOSURE

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> Other | |

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

MIDDLESEX

a. County

77745

c. Book

b. Certificate # (if registered land)

277

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- ☐ 25 ft. - Designated Densely Developed Areas only
- ☐ 100 ft. - New agricultural projects only
- ☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☒ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☒ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. square feet _____ 2. cubic yards dredged _____	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet _____	2. cubic yards beach nourishment _____
e. <input type="checkbox"/> Coastal Dunes	1. square feet _____	2. cubic yards dune nourishment _____
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet _____	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet _____	
h. <input type="checkbox"/> Salt Marshes	1. square feet _____	2. sq ft restoration, rehab., creation _____
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet _____	
	2. cubic yards dredged _____	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet _____	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged _____	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet _____	
4. <input type="checkbox"/> Restoration/Enhancement		
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.		
a. square feet of BVW _____	b. square feet of Salt Marsh _____	

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____

b. number of replacement stream crossings _____



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C. Other Applicable Standards and Requirements

- ☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. ☐ Yes ☒ No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

b. Date of map _____

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
2. ☐ Assessor's Map or right-of-way plan of site
2. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **
 - (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)
 - (b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) ☐ MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) ☐ Vegetation cover type map of site
- (e) ☐ Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. ☒ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. ☒ Is this an aquaculture project? d. ☐ Yes ☒ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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C. Other Applicable Standards and Requirements (cont'd)

Online Users:

Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
a. ☐ Yes ☒ No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
a. ☐ Yes ☐ No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
2. ☐ A portion of the site constitutes redevelopment
3. ☐ Proprietary BMPs are included in the Stormwater Management System.
b. ☒ No. Check why the project is exempt:
1. ☐ Single-family house
2. ☐ Emergency road repair
3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- ☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☐ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. ☐ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☐ List the titles and dates for all plans and other materials submitted with this NOI.

a. Plan Title

b. Prepared By

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☐ Attach NOI Wetland Fee Transmittal Form
9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

JIYEONG

CHUN

6. Payor name on check: First Name

7. Payor name on check: Last Name



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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant

2. Date

3. Signature of Property Owner (if different)

4. Date

5. Signature of Representative (if any)

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



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NOI Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

67 Dothan Street

a. Street Address

Arlington

b. City/Town

c. Check number

d. Fee amount

2. Applicant Mailing Address:

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

3. Property Owner (if different):

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



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NOI Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Excavating	1	\$110	\$110
Grading	1	\$110	\$110
Changing of runoff characteristics	1	\$110	\$110
Intercepting surface water	1	\$110	\$110
Installation of drainage system	1	\$110	\$110
Destruction of plant life	1	\$110	\$110
Step 5/Total Project Fee:			\$660

Step 6/Fee Payments:

Total Project Fee:	\$660
State share of filing Fee:	a. Total Fee from Step 5 \$317.50
City/Town share of filing Fee:	b. 1/2 Total Fee less \$12.50 \$342.50
	c. 1/2 Total Fee plus \$12.50

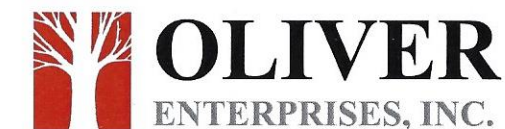
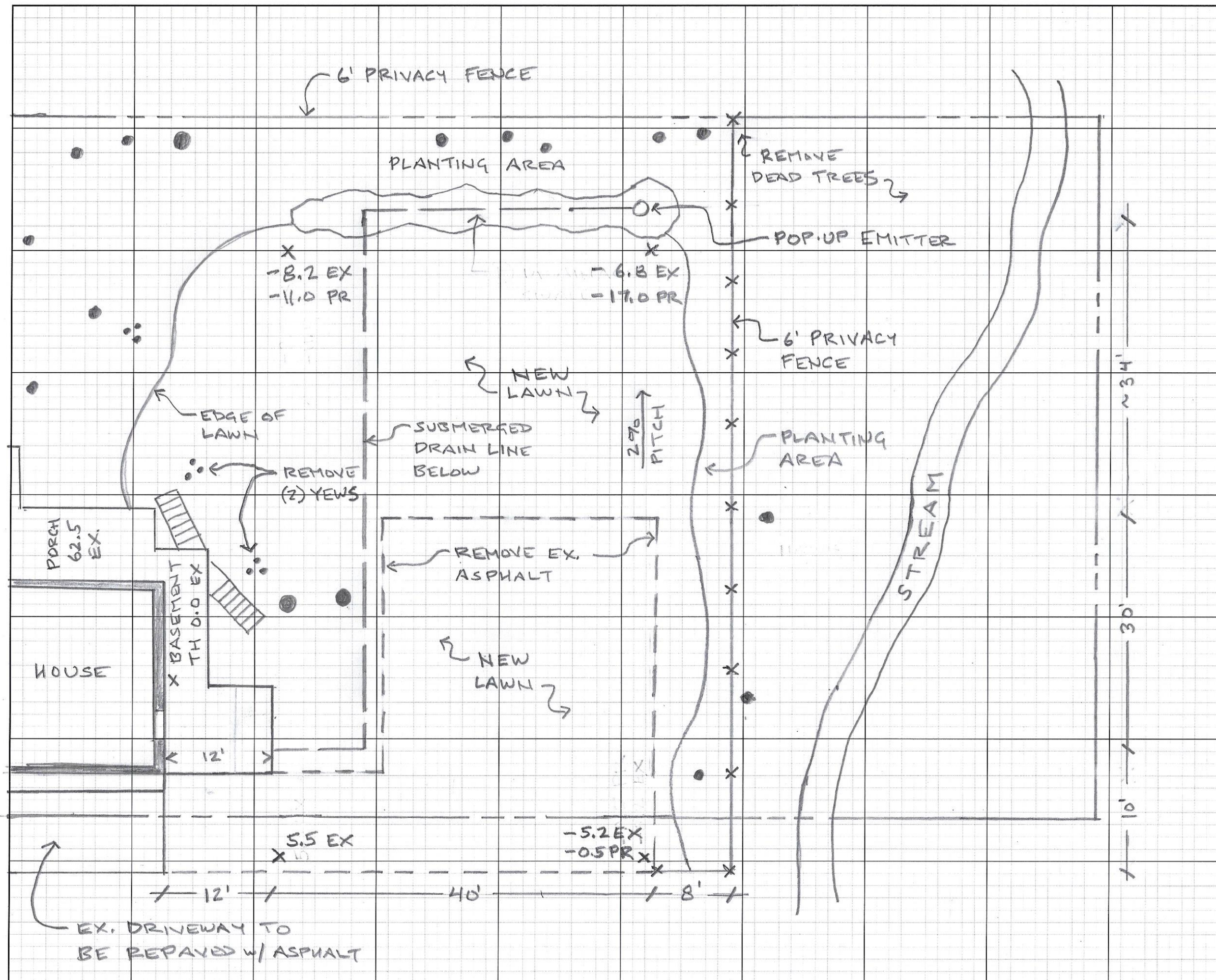
C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)



1429 Osgood Street
North Andover, MA 01845
Tel: (781) 938-9213

ADDITIONAL SPECIFICATIONS

OFFICE NOTES

*PLAN TAKEN FROM
TOWN GIS PLAN & SITE
OBSERVATIONS

OLIVER TEAM

Sales Person:

Designer:

Crew:

Drawn by:

Date:

JOB-SITE INFORMATION

Client Name: CHUN

Address: 67 DOTHAN ST

City/Town: ARLINGTON

State: MA ZIP Code:

Res. Phone #:

Cell Phone #:

Email:

Phone#:

Certified Plot Plan: ☐ Yes ☐ No

DRAWING # L1 SITE PLAN

Scale: 3/32" = 1'-0"